

# Polysaccharides

Polysaccharides (or simply *glycans*) consist of repeat units of monosaccharides or their derivatives, held together by glycosidic bonds. They are primarily concerned with two important functions-structural, and storage of energy.

***Polysaccharides are linear as well as branched polymers.*** This is in contrast to structure of proteins and nucleic acids which are only linear polymers. The occurrence

of branches in polysaccharides is due to the fact that glycosidic linkages can be formed at any one of the hydroxyl groups of a monosaccharide.

Polysaccharides are of two types

1. **Homopolysaccharides** on hydrolysis yield only a *single type of monosaccharide*. They are named based on the nature of the monosaccharide. Thus, *glucans* are polymers of glucose whereas *fructosans* are polymers of fructose.

2. **Heteropolysaccharides** on hydrolysis yield a *mixture* of a few monosaccharides or their derivatives.